



DELAWARE HEALTH AND SOCIAL SERVICES

Division of Public Health

Bureau of Epidemiology

Central Line Associated Bloodstream (CLABSI) Rates and Utilization in Intensive Care Units, Delaware October-December, 2009

Delaware Health and Social Services
Division of Public Health
Health Promotion and Disease Prevention
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Note: For a full description of the background and methodology for this report, please refer to Delaware Hospital Infection Reporting Data: 2008, which can be found at the following website:

http://www.dhss.delaware.gov/dhss/dph/dpc/files/hai_report_2008_final.pdf

**Central Line Associated Bloodstream (CLABSI) Rates in Intensive Care
Units, Delaware, 4th Quarter 2009 (Oct-Dec) and as reported by the National
Health Safety Network (2006-2008)**

Hospital	Number of Infections	Number of Central Line days¹	Hospital CLABSI Rate/1000²	NHSN CLABSI Rate/1000³	CLABSI Rate Percentile⁴	p value⁵	Interpretation⁶
A. I. duPont Hospital for Children	0	749	0.0	3.0	10%	0.1093	Rate is not statistically different than NHSN rate
Christiana Care Health System- Christiana Hospital	0	1099	0.0	2.6	0%	0.0595	Rate is significantly lower than NHSN rate
Christiana Care Health System – Wilmington Hospital	4	366	10.9	2.1	100%	0.0080	Rate is significantly higher than NHSN rate
St. Francis Hospital	1	344	2.9	1.9	79%	0.4791	Rate is not statistically different than NHSN rate
BayHealth Medical Center – Kent General Hospital	0	316	0.0	1.5	50%	0.6233	Rate is not statistically different than NHSN rate
BayHealth Medical Center – Milford Memorial Hospital	1	164	6.1	1.5	99%	0.2175	Rate is not statistically different than NHSN rate
Beebe Medical Center	0	445	0.0	1.5	50%	0.5139	Rate is not statistically different than NHSN rate
Nanticoke Memorial Hospital	0	309	0.0	1.5	50%	0.6299	Rate is not statistically different than NHSN rate

¹ The total number of days of exposure to the device (central line) by all of the patients in the selected population (ICU) during the selected time period (2008).

² (Infections/device-days) x 1000

³ Rate for all participating NHSN hospitals of that location type (the patient care area to which a patient is assigned while receiving care while in the facility).

⁴ An estimate of where the local facility rate falls on the distribution of the rate for all NHSN facilities of that type of location. For example, a percentile of 75% means that 75% of NHSN hospitals were below this rate.

⁵ The probability value from a significance test comparing the local hospital to the NHSN aggregate rate.

⁶ Significance criteria is p<0.05 (95% confidence)

**Central Line Utilization Rates in Intensive Care Units, Delaware, 4th Quarter 2009
(Oct-Dec) and as reported by the National Health Safety Network (2006-2008)**

Hospital	Number of Central Line days⁷	Number of Patient days⁸	Utilization Ratio⁹	NHSN Utilization Ratio¹⁰	Utilization Ratio Percentile¹¹	P value¹²	Interpretation¹³
A. I. duPont Hospital for Children	749	1372	0.55	0.48	67%	0.0000	Utilization ratio is significantly higher than NHSN ratio
Christiana Care Health System Christiana	1099	1584	0.69	0.61	68%	0.0000	Utilization ratio is significantly higher than NHSN ratio
Christiana Care Health System – Wilmington Hospital	366	487	0.75	0.59	91%	0.0000	Utilization ratio is significantly higher than NHSN ratio
St. Francis Hospital	344	572	0.60	0.45	79%	0.0000	Utilization ratio is significantly higher than NHSN ratio
BayHealth Medical Center – Kent General Hospital	316	934	0.34	0.39	43%	0.0008	Utilization ratio is significantly lower than NHSN ratio
BayHealth Medical Center – Milford Memorial Hospital	164	515	0.32	0.39	43%	0.0006	Utilization ratio is significantly lower than NHSN ratio
Beebe Medical Center	445	745	0.60	0.39	87%	0.0000	Utilization ratio is significantly higher than NHSN ratio
Nanticoke Memorial Hospital	309	573	0.54	0.39	75%	0.0000	Utilization ratio is significantly higher than NHSN ratio

⁷ The total number of days of exposure to the device (central line) by all of the patients in the selected population (ICU) during the selected time period (2008).

⁸ The total number of days that patients are in the location during the selected time period.

⁹ Central line days/patient days

¹⁰ Ratio for all participating NHSN hospitals of that location type (the patient care area to which a patient is assigned while receiving care while in the facility).

¹¹ An estimate of where the local facility ratio falls on the distribution of the ratio for all facilities of that type of location. For example, a percentile of 75% means that 75% of NHSN hospitals were below this ratio.

¹² The probability value from a significance test comparing the local hospital to the NHSN aggregate ratio.

¹³ Significance criteria is $p < 0.05$ (95% confidence)